Testimony of
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1. Overview

In this testimony, Energy Commission staff member Michael Jaske refutes the IOU appeals opposing a portion of the Executive Director's annual and quarterly aggregation proposals for resource plan data filed by LSEs. The testimony describes the disputed aggregated summary tables and the underlying confidential data and demonstrates why the IOUs err in claiming that release of these summary tables will cause them to lose a competitive advantage. Two perspectives are used.

First, we show that despite IOU claims about the harmful consequences of the release of the proposed aggregated summary tables, the conventional standard for documenting resource needs around the West is for utilities themselves to release at least as much information as has been proposed by the Executive Director in his June 3, 2005 Notice of Intent (proposal). It is common practice for utilities to make public the entire body of data that the IOUs originally requested confidentiality as a trade secret. In addition, we show that despite IOU claims, much of the data they propose to withhold from public disclosure is already known to the energy industry. Some of the data is known exactly, as a result of regulatory filings to other agencies. For other data variables the IOUs themselves publish close analogues, which allow sophisticated analysts to "estimate" the values the IOUs seek to withhold.

Second, the companion testimony of expert consultant Julia Frayer of London Economics International addresses the flaws of the experimental economics analyses put forward by Southern California Edison (SCE) as the principal support for its rationale, and demonstrates that release of the aggregated summary tables will lead to lower, not higher, prices.

A. A portion of proposed aggregated summary tables are under dispute.

This testimony addresses the issue of the release of aggregated summary tables derived from resource planning data filed with the California Energy Commission (Energy Commission) pursuant to Supply Forms and Instructions adopted as part of the Integrated Energy Policy Report (IEPR) process in February and March 2005. [1] Eighteen load-serving entities (LSEs) filed a resource plan, and the three investor-owned utilities (IOUs) filed a base case or "reference" resource plan and several alternative scenarios as well.[2]

[1] 2005 Supply Forms and Instructions were adopted in two parts. Requirements covering a "reference case" were adopted on February DD, 2005, and a supplemental set of Supply Forms and Instructions were adopted on March DD, 2005. The filings pursuant to these requirements were due from LSEs March 1, and April 1, respectively.

[2] A load-serving entity is one with an obligation to sell electricity to retail customers. LSEs include municipal utilities, such as SMUD or LADWP, which are publicly owned and governed by a Board of Directors; Investor-owned utilities (IOUs), which are privately owned, but regulated by the California Public Utilities Commission and guaranteed certain types of cost recovery; and energy service providers

Among the data filed were monthly projections of electricity supply by specific resource type (e.g., utility-owned generation by type of generating technology, and different categories of contracts by type of generating technology.) When the IOUs provided this data, they requested that it be designated confidential, pursuant to the Energy Commission's confidentiality regulations. This request was granted on March 30, 2005. However, in order to provide Commissioners, other state agencies, and members of the public participating in the IEPR process with access to information on which the Energy Commission will be basing its finding and conclusions, the Executive Director subsequently evaluated whether aggregations of the confidential data would prevent the disclosure of the confidential elements of the data, while allowing some public review of LSE's energy supply situation. (Aggregation is commonly-accepted from of protecting confidential data, and is explicitly identified as such in the Commission's regulations governing disclosure of information.) After considering several options, the Executive Director issued an aggregation proposal in which the IOU supply data was aggregated in two different ways. First, the monthly data were combined to create quarterly and annual summaries. Second, the individual resources that were identified were collapsed to resource categories, thereby masking most individual suppliers. For the large IOUs, this typically means reduction from up to 100 individual resources to about 15 resource categories. Ten specific aggregations were proposed, four of which included data only for each IOU's "bundled customers" (those who purchase electricity from the IOU), and six of which included data for all the customers within an IOU's planning area (bundled customers plus customers who obtain their electricity by means other than the IOU but use the IOU's electricity distribution system to receive the electricity.) The specific proposal identified the following categories of aggregated data:

1) Bundled customer annual capacity
2) Bundled customer quarterly capacity
3. Bundled customer annual energy
4. Bundled customer quarterly energy
5) Planning area annual capacity
6) Planning area quarterly capacity
7) Planning area annual energy
8. Planning area quarterly energy
9) Planning area annual range of capacity
10) Planning area quarterly range of capacity

All thee IOUs opposed 1 and 2, PG&E and SCE opposed 4, SDG&E and PG&E opposed 6, and PG&E opposed both 8 and 10. Staff has subsequently withdrawn its proposal for 10, leaving 1, 2, 4, 6, and 8 at issue in these appeals.

(ESPs), which are private companies serving load and which do not own their own transmission, or electrical distribution systems and which typically purchase power from individual generators and transmit the power over the transmission and distribution lines of the IOUs and municipal utilities. Resource plans consist of an identification of the types and quantities of resources that an LSE proposes to use to meet customer demand over some specified time frame. In this IEPR, resource plans were provided for the years 2006 to 2016.

B. The aggregated summaries, if not resource plan data themselves, are essential to electricity planning in California.

The resource plan data (aggregated summaries of demand forecasts, identification of specific resources available to meet those demands, and the net difference between supply and demand for a specified time interval) are planning data. They are commonly used to characterize the utility's resource situation looking out years into the future. The long time period needed to plan, permit and construct power plants and to implement various types of energy efficiency and demand response programs necessitates a multi-year view of the future. Typically, these data will show that the LSE has covered it load in the near term and that it has not yet made commitments to cover all of its load in the intermediate or long-term period. Thus, there is some degree of resource need, typically increasing through time.

The electricity planning process is designed to understand the size of this "gap" and to examine whether there are policy preferences for influencing how it should be filled. Comparing and contrasting alternative options requires an understanding of the differential costs over the lifetimes of these alternatives, and how they might operate as part of a portfolio of resources satisfying customer demand. Regulatory agencies with oversight authority over utilities and other LSEs commonly require such resource plan data to be submitted for review either periodically as part of an integrated resource planning process, or in establishing a foundation for procurement practices that are sanctioned or proscribed by the regulatory agency as a matter of public policy. In addition, these data provide important market signals to potential generators who may seek to meet an identified electricity resource need. As a mater of public policy, the Energy Commission believes such planning processes must be conducted with the input of the public. The aggregated summary tables proposed by the Executive Director allow the resource plan data to be released in a sufficiently aggregated form to protect trade secrets, yet in a sufficiently disaggregated form to allow an informed public policy debate.

2. The IOUs have failed to support their assertions of harm.

The IOU assertions that harm will come to their bundled service ratepayers through the release of the disputed data are misguided. They claim that release of this data will allow suppliers to charge the IOUs higher prices fro electricity than they would be able to absent the information. In order to support this claim, they draw analogies between the current electricity market and 1) market structure used in Dr. Charles Plott's experiment (included in SCE's filing); 2) the market structure in effect leading up to the 2001 – 2002 energy crisis; and 3) a poker games or a football huddle. In doing so, the IOUs ignore a number of crucial distinctions between those diverse situations and the current market structure. They also ignore the protections provided by the Executive Director's aggregation proposal, which shields individual resources, excludes the first three years, and provides much less specificity than the confidential data. Finally, they ignore the

economic benefits that will accrue to ratepayers – whom they claim to be protecting – if data that provides appropriate investment signals is made available to suppliers.

A. Other Utilities in California and the West provide access to their resource plan data.

The aggregated summary tables which the IOUs claim need protection are commonly available from many utilities located within the Western Interconnection.[3] Such summaries or even the resource plan data itself are made available by all kinds of utilities, large and small, public and investor-owned, those with supply/demand surplus and deficits. In fact, these data were prepared and publicly submitted on a regular basis to the Energy Commission from 1975 to 1997 as part of the Biennial Report and Electricity Report proceedings.[4] [5]Historically, public distribution of these data has been the norm, and secrecy during the period between 1998 and 2004 is the aberration.

i. Other California load serving entities have provided access to their resource plan data.

Twenty-one load serving entities provided resource planning data to the Energy Commission as part of the *2005 Energy Report* proceeding. They consist of five energy service providers (ESPs), three investor-owned utilities (IOUs), and 13 publicly-owned utilities (POUs). Four of the five ESPs requested confidentiality of the detailed monthly, resource specific data. All three IOUs requested this same confidentiality. One of the 13 POUs requested such confidentiality.

In response to the Executive Director's planning area aggregation proposal (which includes confidential data provided by all three types of LSES), every single ESP and POU agreed to have their data aggregated and published as part of planning area annual and quarterly tables. Only the IOUs objected. Clearly the great majority of the POUs do not believe even the full detailed monthly, resource-specific data itself needs confidential treatment. As competitive businesses with only very limited financial oversight by state or federal agencies, the ESPs naturally sought protection for their detailed data, but were willing to have aggregated summary tables based on their data reported as part of planning area results that the IOUs have opposed.

[3] The Western Interconnection (WI) consists of the majority of the area of 11 Western States, the provinces of British Columbia and Alberta in Canada, and portions of the northern portion of Baja in Mexico. The electrical grid covering this entire area is physically interconnected and power flows anywhere according to the laws of physics. Various formal markets and informal power supply contracting processes exists among utilities in the WI.

[4] Energy Commission regulations, Title 20, Division 2, Chapter 3, Article 2, Section 1347 require LSEs to submit resource plans on a biennial basis using forms and instructions to be adopted by the Energy Commission each biennial cycle.

[5] SB 1389 (Chapter 568, Statutes of 2002), among other changes, modified sections 25300-25326 of the Public Resource Code and re-established a biennial planning process to culminate in a policy report to the Governor and legislature.

ii. Major utilities around the West provide access to their resource plan data.

Table 2 provides a summary of the resource plan disclosure policies of nine major western IOUs. For each utility, Table 2 summarizes the extent of disclosure of demand forecasts, existing and planned resources, and resource need. Internet websites are provided to demonstrate the public access to these materials. (Appendix A provides more detail about the resource planning information available for five major IOUs around the West.) All of these utilities disclose as much or more resource plan information than what the Executive Director proposed for annual or quarterly summaries. In some instances, such as the monthly data, the utilities disclose much more detail than what the Executive Director has proposed to disclose.

Arizona Public Service (APS) provides annual energy and capacity summaries of its system load, its resources, and the net surplus or deficit position. These data were published as part of a long-term contract solicitation, so it is obvious that APS intended the generator community to acquire and consider these data in preparation of bids. APS also provides monthly energy data for categories of resources and monthly resource need, which is more information than the Executive Director proposes to disclose.

Idaho Power provides details of its resource surplus or deficit position on a monthly basis for both energy and capacity for 2004 – 2013. Idaho Power explicitly shows graphs of these monthly surpluses or deficits, which range from considerable deficit to considerable surplus across the months in any specific year. Idaho Power also provides the demand forecast and resource plan detail to substantiate these resource surplus or deficit results. By providing monthly resource balance summaries and annual resource-specific information, Idaho Power provides more detailed information than the Executive Director has proposed to disclose.

PacifiCorp has provided a great detail about its 2003 and 2004 integrated resource plans (IRP) in public documentation posted on its website. PacifiCorp provides all of the information contained in the annual aggregated summary tables for each of its two electric systems – the western one centered in Oregon and the eastern one centered in Utah.

In their objections to the preliminary proposal of the Executive Director's IOU bundled customer-specific aggregated capacity tables, the three IOUs expressed concern that revealing bundled customer versus total service area loads would reveal the extent to which the IOUs predicted loss of load from community choice aggregation or municipalization, direct access, or core/non-core market structures.[6] Revealing loss of load from these means is not uncommon in those jurisdictions where customers are provided choice. Portland General Electric, Puget Sound Energy, and Northwestern all identify loss of traditional utility load to other retail suppliers.

[6] SCE Appeal, Appendix 2, page 5-of-6.

iii. Practices of these other utilities indicate that withholding resource plan data does not maintain an economic advantage for IOU ratepayers.

The practices of these other California utilities and out-of-state utilities are directly relevant to the issues the California IOUs have raised. The California POUs and the other utilities around the Western Interconnection purchase from the same market as do the utilities who protest disclosure of aggregated long-term summaries of planning data. If the claims of the California IOUs about the harmful consequences that disclosure would cause were true, these other utilities would also suffer economic harm, and would likely be withholding their own long-term planning data. They are not. The claims of harm made by the California IOUs, and hence the claim that the aggregated tables are trade secrets, simply are not supported by the actions of these other entities.

B. IOUs themselves provide similar data in other planning forums and to the federal government.

In making their March 1 and April 1 filings of Supply Forms and Instructions to the Energy Commission, the IOUs themselves developed a variant of the annual, resource category energy summary table proposed by the Executive Director and offered these for public release. These public S-2 forms would have provided considerable amounts of aggregated energy summary information to the public. Since long-term energy to capacity relationships for most classes of resources are reasonably stable, revealing energy information provides s strong basis for knowledgeable energy experts to "estimate" the aggregate capacity of these resources and any supply/demand gap.

As part of their transmission planning responsibilities, IOUs disclose load forecasts as part of the annual CAISO grid planning process. All three IOUs disclose annual planning area peak demand forecasts under 1:10 weather conditions. The relationships between loads under 1:10 weather and loads under 1:2 weather can be guesstimated.[7] As part of a March 21, 2005 public workshop on summer 2005 supply-demand balances, the Energy Commission published data for precisely these values for the months of June through September, and IOUs in their comments at the workshop provided their own peak demand/weather assessments that could be used by experts to "reverse engineer" peak demand forecasts. The relationship between planning areas to bundled customer load are easily "guesstimated" to a few percentage points.

In addition, all three IOUs are obligated to file various FERC forms each year. Among these are FERC Form 1 requirements that monthly capacity and energy for their systems be released. PG&E, SCE and SDG&E filed these data for calendar 2004 in the spring of 2005. These data are available from FERC via its website or from the IOUs themselves from their own websites. These monthly data show patterns that are reasonable stable through time and that can be used to convert from energy to peak demand or to

[7] In materials distributed by email on July 6, 2005 to all participants in its 2005 transmission planning process, SCE distributed a chart that provides the annual peak demand forecast under 1:2, 1:5, and 1:10 weather conditions. For SCE, no "guesstimating" is needed.

disaggregate from annual to monthly. This is the sort of "data mining" that numerous consultants routinely conduct for their clients.

All utilities greater than 200 MW peak demand are also obligated by FERC to provide annual energy and seasonal winter/summer peak demand forecasts out ten years as part of the annual FERC Form 714 filings.[8] PG&E has continued to file these data through 2004, although SCE and SDG&E seem to have shirked this obligation with no enforcement action yet from FERC.

In light of these disclosures, it is naïve to believe that the generator community does not already have approximate knowledge of these very matters. Those in the industry with detailed knowledge of utility resources make sophisticated estimates about the energy to capacity relationship of the data that have been already revealed. This allows the generator community to make informed approximations of the specific capacity summaries that the IOUs seek to protect. If the rewards are so large that generators can reap millions of dollars of financial gain from abusive market power using the aggregated summary tables that the Executive Director proposes to release, then the generator community will have already invested tens or hundreds of thousands of dollars to hire consultants to ferret out any and all data that exist and to infer that which cannot.[9] Because recent past, current, and near-term data are much more critical to the power marketing community, whole firms have sprung into existence just to assemble and distribute power plant operating information.[10] [11]Thus, the IOU-specific data that the Energy Commission proposes to release is at best a modest improvement over the inferences that the generator and energy consulting community have already developed.

C. Release of aggregated summary data will not lead to a repeat of the conditions of 2000-2001.

IOUs have asserted that the Energy Commission proposal could contribute to a repeat of the difficult times of 2000-2001, in which prices were high, generators were accused of cheating IOUs and/or the State of California, and the system neared collapse on several days. This assertion is completely unsupportable.

[8] FERC Form 714, Part III, Schedule 2.

[9] For example, Henwood Energy Services offers anyone with the license fee access to a production cost simulation model that covers the entire Western interconnection. The model simulates the performance of the overall system including the resource-specific energy and capacity of every resource included within the IOU resource plans. The model makes projections on an hourly basis many years out into the future. The results can be aggregated into any form of table, including ones that nearly exactly match those proposed by the Executive Director. While these simulated results might not exactly match the data the IOUs seek to protect, they would be fairly close.

[10] Genscape is a commercial firm that has installed remote monitoring equipment outside of power plant fences to collect real-time information about individual facilities that is marketed as part of a real-time monitoring system for power traders, buyers and sellers. See http://www.genscape.com/na/power.shtml

[11] The U.S. Environmental Protection Agency collects hourly production data for all thermal power plants using continuous emission monitoring devices. This data is widely used to track power plant performance by the energy industry.

In 2000-2001, IOUs were required to purchase from a central power market that operated a Day-Ahead hourly energy market. IOUs and other LSEs bid in their loads, and generators bid in their supplies. A market clearing price was determined by these bids. Shortages of supplies, whether from adverse hydroelectric conditions in the Northwest or abuses of market power by generators could lead to high market prices. Since a large majority of IOU purchases were from this market, overall generation costs were tied closely to these market prices. If hourly energy prices increased, average energy costs increased with little lag. Beginning in June 2000 and continuing until a FERC order halted this market system in June 2001, insufficient bids drastically increased prices, hence costs, and essentially bankrupt the three IOUs, forcing the State of California to purchase on behalf of IOU customers. Then, attempts by the State to control lower short term prices by entering into long-term contracts resulted in high-priced long-term contracts. Finally, FERC controlled market prices by ordering all generators to offer power into the market and installed a market price cap.

In contrast, in 2005, the vast majority of IOU generation comes from power plants they own or from multi-year power purchase contracts. The Day-Ahead energy market run by the Power Exchange no longer exists, and the Power Exchange itself exists only as a bankrupt organization handling financial settlements of funds transferred to it as a result of FERC orders and court decisions. There is no organized Day-Ahead energy market, but there are a few thinly traded, standardized contract forms that allow for a limited degree of price discovery for bilateral contracts. Aggregate statistics from these markets are reported in the trade press. The CPUC does not allow the IOUs to purchase more than 5% of capacity needs from the spot market. The vast majority of IOU power purchasing is through long-term contracts resulting from organized request for offer (RFO) solicitations. Thus, the IOUs have a wide range of options for meeting demand, from short term-contracts to long-term contracts. The prices paid under these contracts can be fixed, or they can be cost-based. Delivery can be taken at different points within the IOU distribution system. Finally, the IOUs can develop and implement energy efficiency and demand reduction programs to affect the level of energy and capacity needs.

Another crucial distinction is the Energy Commission's efforts to release some degree of forward planning information. Unlike 2000-2001, when the IOUs did not provide any forward supply/demand balance information to other market participants, the Energy Commission is attempting to release and make widely known much information about supply/demand balances so that all participants in the market can understand and react to market conditions. LSEs can create a portfolio of contracts knowing the overall market balance. Generators can understand the likely economic effects of developing new resources and can bid projects with start dates several years into the future with some assurance that they will have a market for their product and can recoup their investment.[12]

[12] An extensive discussion at the July 7, 2005 *2005 Energy Report* Workshop on Electricity Issues and Policy Options about the 8,000 MW of permitted, but unbuilt, power plants in California, centered on the need for these developers to obtain long-term contracts. A "site bank" of permitted, unbuilt facilities can be helpful to maintaining supply/demand balance since these can be built and operating much more quickly than starting from scratch. One participant noted that developers might be willing to go through the

As will be explained in more detail in the companion testimony of Julia Frayer of London Economics International, the provision of this planning information that the Executive Director has proposed and that the IOUs oppose, is precisely what the market needs to operate most efficiently and at the lowest sustainable cost over the long term. These long-term effects will benefit ratepayers – the same ratepayers whose economic interest the IOUs claim to be protecting in designating this data a trade secret.

3. General comments on the IOU claims that the proposed aggregated summary tables are trade secrets.

The issue to be decided as a result of the IOU appeals to the Executive Director's aggregation proposal is not whether there are grounds for agreeing that some LSE resource plan data are trade secrets, since the Executive Director has clearly agreed to provide such a designation in numerous determinations, but whether the aggregated summary tables computed from the IOU data are themselves trade secrets.

A. Monthly, resource specific data are trade secrets and will not be exposed by the aggregation proposals.

As a result of requests for confidentiality for March 1 and April 1 resource plan filings, the Executive Director determined that each and every LSE's confidentiality request for the data submitted on forms S-1 and S-2 should be granted.[13] This means that monthly, resource specific data on the forms is confidential for the three IOUs, the four ESPs, and the single POU that made such requests. The equivalent data for the one ESP and the12 POUs that did not make such requests is not confidential and is available to the public.

However, in order to permit the public to participate in the 2005 Energy Report proceeding, the Executive Director proposed that aggregations of the confidential resource plan data be made and released. First, the staff carefully evaluated what level of aggregation would protect the confidentiality of the underlying data. Staff first made an informal proposal, and offered the LSEs the opportunity to comment on the proposal in person and in writing. A formal proposal was issued on June 3, 2005. This proposal include several different aggregation proposals that condensed the monthly, resource specific data to quarterly or annual, resource category summary tables along with two different ways of groupings of LSEs together. IOUs and some ESPs responded to the proposal on June 17. The single POU responded favorably on June 23, 2005.

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licensing process on the basis of supply/demand projections, but construction itself would require a long-term contract.

[13] Each of the LSEs making confidentiality requests for resource plan data also made requests for other types of data that the Supply Forms and Instructions required LSEs to provide. An example are the Form S-5 data that requires substantial detail about each bilateral contract. LSEs requested and the Executive Director agreed that these contractual details constituted trade secrets. The aggregation proposals of the Executive Director made no attempt to release these data, even in aggregated summary form, because they are not necessary to form a general understanding of the loads, resources, and net short/long position of the LSE in order to support a public process to identify overall resource needs and resource preference policies.

Table 1 provides an overview of the six proposals and the IOU responses. In their comments, IOUs generally assert that IOU bundled customer capacity tables would reveal too much to potential suppliers, and thus even these aggregations are trade secrets that should be protected to avoid adverse consequences to bundled service ratepayers by higher bid prices than would otherwise be submitted. Annual capacity for IOU bundled service loads and quarterly data in almost any form finds objection from one or more IOU. The IOUs did not coordinate their final responses, and the three rationales seem to be at least partially contradictory.[14] This table also indicates which of the proposed aggregated summary tables have now been published and released to the public.

B. Poker game and football huddle analogies are simplistic and misleading.

In an attempt to create analogies that represent a simplified picture of the information disclosure issues under dispute here, SCE's witness Plott and SCE witness Cini create analogies of poker games and football huddles. Plott asks why one would play a poker game in which one was asked to lay down his cards while all other players could keep theirs' secret. [Plott Declaration, p. 3, lines 10-14] Cini asks how successful one would be if your football team invited the opposition into the huddle on each play. [Cini Declaration, p. 6, lines 23-28] These analogies have nothing to do with electricity markets and mislead more than they inform.

The three IOUs are the largest California purchasers in a western power market that involves about 25 other California utilities, about 15 California ESPs, and dozens of utilities serving other parts of the West. There are 10 or more private generating companies and 60 or more utilities making various kinds of power sales arrangements, spot, mid-term, and long-term. As is documented in Table 2 and Appendix A, the majority of the major IOUs other than the three California IOUs disclose as much or more than the aggregated summary tables proposed by the Executive Director. The vast majority of POUs, both large and small disclose these same planning data. Just as California IOUs are not unique in their exposure to retail competition, Portland General Electric, Puget Sound Energy, and the western portion of PacifiCorp are as reliant upon contracts as are the California IOUs.

The Western power market is not a poker game with 4-7 players. It is not a football game with two players. It is more like a farmer's market in which one comes back week after week to purchase vegetables from a large group of suppliers, some of which have specialized products and some of which compete directly with one another to sell identical products to customers. General information about the size of one family being purchased for versus the size of another family being purchased for becomes obvious to

[14] For example, both PG&E and SCE have considerable hydro-electric generating assets, but SCE was willing to provide quarterly energy data revealing its planned use of these assets, while PG&E was not. PG&E is likely to be more dependent upon this kind of resource. At what point does the prominence of a resource category justify withholding planned usage information about from the public? If one were to assume that SCE and PG&E have similar rationales for identifying planning data that constitutes a trade secret, then the degree to reliance upon hydro-electric generation creating a trade secret is evidently somewhere between the levels that SCE and PG&E have.

the sellers over time. Further, the purchaser can go from one market bazaar to another, perhaps incurring some transportation cost that offsets lower prices for the products. A purchaser can also enter into a long-term arrangement with an organic farmer who will deliver specialized products to the door to satisfy a portion of the purchaser's needs. The purchaser may also have garden space in which he is raising a portion of his needs, which can at least partially substitute for making purchases from others, both in the short-term and in the long-term. Finally, the purchaser can evaluate whether some of the purchased food is wasted, and if so, reduce the amount of food purchased. Completing this analogy, the Executive Director's proposal is like the mayor of the town deciding to release the size of the three largest families, and the population of each block. Such population summaries have some correlation with food consumption, but do not give suppliers information that allows them to charge higher prices for their products.

Simply put, the market in which this information disclosure might influence outcomes is vastly more complex than the simple analogies of the poker game and football huddle. These analogies are completely misplaced. These are cartoonish distortions of the complexities of the electricity market place.

4. Specific comments on the IOU claims that the proposed aggregated summary tables are trade secrets.

A. Appeals by IOUs of bundled customer energy and capacity proposals

In this section, Energy Commission staff examines the various aggregated summary table proposals that the IOUs have appealed. The perspective offered is largely focuses on whether the proposed aggregated summary tables are similar or dissimilar to what other IOUs in the Western Interconnection and POUs in California readily publish, and whether the data is specific or accurate enough to influence bidding. The companion testimony of Julia Frayer of London Economics International examines the IOU appeals from the perspective of theoretical economics. Both of these perspectives refute the IOU assertions that these aggregated summary tables are trade secrets that can be shielded.

i. Refutation of appeals of IOU bundled customer annual capacity tables

The three IOUs all appealed release of an IOU bundled customer annual capacity table. They assert that release of the single annual resource need value (sometimes called residual net short) will be used by generators to game bids and will cause bundled customers to pay more for generation. [Plott Declaration, p. 2, lines 20-21] For three reasons, Staff believes this is not likely to be true.

First, an annual capacity table showing loads, various categories of resources, and the residual net short on a capacity basis is commonly released on utility website around the West. These utilities and numerous others purchase a portion of their requirements from the same generator community that the California IOUs purchase from. The 13 POUs in California that either did not request confidentiality at all or were willing to have resource

plan data released in this form apparently do not have the same concerns release of this data will put them at an economic disadvantage.

Second, while the annual resource need (or RNS value) for each IOU does provide an indication of the magnitude of resources that the IOU must acquire as of the date of preparation of the resource plan, it is not updated as an IOU takes procurement actions to acquire new resources or to replace existing resources until the next cycle of the planning process and it is revised and submitted. As a result, it is increasingly inaccurate as time goes by. It does not provide any direct indication of how much an IOU will need to acquire in any one contract or even in any one solicitation of bids. It does not define the duration of the contract term that the utility wishes to acquire through new contracts or the location at which the electricity will be delivered. Rather than total capacity that must be in place for the summer of 2009, it is the details of the products the LSE wishes to acquire that actually influences how the generator will prepare and submit bids. An estimate of the total amount of resources for the peak hour that will be procured from a whole variety of solicitations of various different products does little to affect how generators bid in any one of these solicitations.

In addition, the Figure 2 put forward by Plott is misleading in that it suggests that the following simple sequence would take place:

(1) Energy Commission release of aggregated planning tables,
(2) IOUs announce RFO mechanisms to obtain bids,
(3) collusion by bidders results in higher prices being offered, and
(4) IOU forced by CPUC procurement requirements to accept high priced bids.

In actuality, from the summer of 2005, when the aggregated summary tables might be released to summer 2009, when the resources need to be in place, each IOU is likely to have sponsored 3-6 different RFOs and received responses to multiple cycles of offers. There are many opportunities for the IOU to procure specific kinds of products and to determine for themselves whether to announce a procurement target for a specific RFO, whether or not to take any of the bids offered, or even to reject all bids and pursue other resource strategies. As far forward as 2009, IOUs are authorized to and capable of proposing to construct IOU-owned generation or to create and/or expand IOU customer demand response programs. Both of these alternatives to generator contracts are allowed by CPUC procurement rules.

Third, Plott asserts that knowledge of the "resource need" gap "…reveals almost exactly how much capacity the IOUs must buy from suppliers." [Plott Declaration, p. 2, lines 20-21], and this will cause suppliers to bid higher by holding back. SCE Appeal, Figure 2 in Exhibit C, is designed to make his point. [Plott Declaration, p. 4, lines 12-17] Staff disagrees that this is the likely outcome for aggregation summary tables that identify either annual or quarterly "resource need."

Under the procurement authority granted to IOUs by CPUC D.04-12-048, IOUs have been directed to procure a portfolio of resources to satisfy their customer's needs and a 15-17% planning reserve margin over and above peak demand. The CPUC's resource

adequacy requirements extend out only one year ahead, so in the fall of 2005 LSEs will be procuring to this standard for the months of June 2006.[15] While the CPUC expects IOUs to move in the direction of longer term forward commitments, there is no obligation to do so at any price. If fact, D.04-10-035 establishing resource adequacy requirements explicitly allows IOUs to defer purchases needed to satisfy the 15% planning reserve requirements if they believe that the bid prices offered are excessive.[16] Thus, for the period beginning 2009 out to 2016, which is the time period in dispute resulting from the IOU appeals, the assertions of Plott and Cini are unsupported by the CPUC procurement rules. There are no mandatory purchase requirements that far forward.

For these reasons, the Energy Commission staff does not believe that the IOUs have demonstrated that this aggregated annual capacity summary table meets the definition of a trade secret.

ii. Refutation of appeals of IOU bundled customer quarterly capacity tables

The three IOUs all appealed an IOU bundled customer quarterly capacity table. They assert that release of the values for the four quarterly resource needs (sometimes called residual net short) will be used by generators to game bids and will cause bundled customers to have to pay more for generation. Since one of these four quarterly tables will be identical to the annual capacity table, then release of the quarterly table creates the same harm as the annual table, and perhaps a bit more from release of the three other quarterly tables.

Energy Commission staff agree that quarterly capacity tables are inherently more damaging than annual ones. Since products on the market are based on calendar quarter terms, the differences in the four quarterly capacity tables could be construed to indicate the incremental purchases from one quarter to the next. For example, by subtracting the second quarter value from the third quarter value, one can obtain the increment of capacity needed for the third quarter over and above that needed for the second quarter. However, there are at least two reasons such estimates are apoor indicator of actual purchases.

First, the “delta” computation described above reflects the change in total capacity requirements between the two calendar quarters. An IOU with a portfolio of contracts is likely to have some expiring at any point in the year. Thus, the minimum purchase that could be expected for a third quarter is the increment just for that quarter and the total amount of expired contracts being replaced. If the aggregation proposal revealed individual contracts there taking these expirations into account could be factored into RFO bids. However, the Executive Director proposal does not release resource data

[15] The resource adequacy requirement is actually even less binding. On a Year-Ahead basis, LSEs must only demonstrate that they have acquired 90% of the resources necessary to satisfy peak demand plus the additional 15% reserves. It is not until a Month-Ahead compliance filings that LSEs must demonstrate that they have acquired the full 100% of their requirements.
[16] D.04-10-035, pp. 15-16.

below the level of roughly 15 aggregated resource categories. All non-QF, non-renewable bilateral contracts are reported as a single group. Thus there is no way to actually discern the total magnitude of purchases the IOU may be proposing to make in any one RFO process.

Second, these values would not be released until three years ahead, e.g. for 2009 and beyond, making them a poor indicator of actual IOU contract signings. The specific situation of the IOU would have changed by the time the bids are actually made, due to the fact that demand may have shifted, and that additional resources have been procured in the interim. Moreover, it may be highly desirable to provide a general description of the amount of incremental capacity that is needed for just the third quarter, since it may be that this very specific information helps policy makers to decide that a demand response program which can operate just during the summer peaking season is a cost-effective way to fill some or all of that need. It may also be helpful to a generation developer to know general quarterly capacity information as the developer may be seeking an opportunity initially to construct a simple cycle peaking power plant for satisfying peaking needs that might at some later date be converted into a combined cycle facility that can also supply energy, if and when the IOU need arises.

As a result, Energy Commission staff does not believe that the IOUs have demonstrated that this aggregated number meets the definition of a trade secret.

iii. Refutation of appeals of IOU bundled customer quarterly energy tables

In their appeals, SCE and PG&E oppose release of quarterly energy data. (SDG&E chose not to appeal this one of the Executive Director's proposals.) In its appeal, PG&E plainly states that it opposes release of all quarterly data at any level of aggregation. The principal rationale PG&E offers is that it has significant seasonal energy and capacity fluctuations from the generation its owns or has under contract, and that release of these fluctuations would permit other market participants to "manipulate the procurement process at the expense of PG&E and its customers." [PG&E Appeal, p. 3] At the outset, let us establish that actual production at each hydro-electric facility must be reported to FERC in public documents. [17]

However, PG&E's claim ignores the fact that there is already significant public information about these seasonal energy and capacity fluctuations. As shown in Table 2 and Appendix A, several major IOUs in the Northwest (Avista, Idaho Power, and Puget Sound Energy) reveal monthly energy resource needs. These utilities are just as exposed to hydroelectric generation fluctuations as PG&E is exposed, if not more so.

Using annual energy summaries that IOUs allowed to be disclosed, the Sacramento Municipal Utility District is exposed (1,740 GWh out of 12,000 GWh requirements) to a

[17] FERC Form 1 requires PG&E to provide very detailed annual data for each individual large hydro-electric facility and less detailed data for each small hydro-electric facility. Any utility with a FERC licensed hydro-electric facility has the same obligation. Thus, PG&E's annual variations are already public knowledge.

similar degree as PG&E is exposed (15,000 GWh out of 82,000 GWh requirements).[18] SMUD has not opposed the Executive Director's quarterly energy aggregation proposal. In fact, SMUD has not requested that the monthly, resource-specific data that it filed be classified as confidential. PG&E and SMUD have facilities in the same watersheds, and are essentially exposed to the same hydroelectric generation risks. Further, when PG&E and SMUD are dealt a poor hand by rainfall and snowpack variations, they both go to the same market for supplemental resources to balance their resources plans. When nature rewards them, they both may have seasonal surpluses they sell into the same market. The fact that other utilities with similar resources do not protect this information indicates that withholding it from disclosure does not create an economic advantage for these two utilities.

Finally, we note that in rulings made in the two recent cycles of procurement proceedings, the CPUC has directed the IOUs to make available greater amount of resource category data than in the previous cycles, including historic quarterly energy generation. Further, the IOUs were ordered to make available their utility-owned generation (which consists of three broad classes – nuclear, fossil, and hydro-electric) estimates for 2006 on a quarterly basis. The quarterly hydroelectric generation variations that PG&E seeks to protect in its appeal of the Executive Director's aggregation proposal are precisely the same hydro-electric generation variations that the ALJ Ruling requires for historic years and for 2006. For 2009 and beyond, PG&E likely expects average weather conditions, whereas the historic data certainly reveal the variations actually experienced in these years. Revealing the historical variations is likely to yield more precise data than the total, long-term average expected generation from these hydro-electric generators present in the aggregated summary tables. Requiring IOUs to release the 2006 projections for IOU resources exposes about 39% of PG&E's total resources on an annual energy basis, which includes the "vital" hydro-electric component PG&E uses as the centerpiece of its justification for protection.[19]

SCE makes the same arguments in favor of protection for quarterly energy tables, using hydro-electric fluctuations as does PG&E; however, SCE also stresses the net long situation and the damages it alleges would befall its ratepayers if its energy surpluses were known on a quarterly basis. [SCE Appeal, pp. 6-7]

Finally, the energy portion of the demand forecast was required to be released on a quarterly basis for years 2006 – 2010. The IOU bundled customer portion of the quarterly energy table that PG&E and SCE opposes releasing in their appeals of the Executive Director proposal contain precisely the same quarterly values that the May 9, 2005 Ruling of ALJs Halligan and Thorson has ordered PG&E and the two other IOUs to release.[20] PG&E has already provided this data to all members of the R.04-04-003 service list. This means that this portion of the proposed quarterly aggregated energy

[18] CEC Staff Paper, "Resource Plan Aggregated Data Results," CEC Report No. CEC-150-2005-001, June 2005, Tables 11 and 44 for year 2009.
[19] CEC, CEC-150-2005-001, Table 11.
[20] CPUC R.04-04-003 and R.04-04-025, ALJ Halligan/Thorson Ruling, May 9, 2005, p. 27.

table does not meet the definition of a trade secret, which is limited to data that has not been made public.

For these reasons, Energy Commission staff does not believe that the IOUs have demonstrated that IOU-specific, quarterly energy summary tables proposed by the Executive Director meet the definition of a trade secret.

B. Appeals by IOUs of planning area energy and capacity proposals

First, we note that IOUs did not oppose the annual capacity and energy tables aggregated to planning areas. The stated objective of the Executive Director to find a meaningful level of aggregation that the LSEs could support was achieved for the annual versions of these tables. Staff gratefully acknowledges a shift in IOU position between the time of their response to the preliminary aggregation proposal and the time of their responses to the formal proposal. IOUs initially opposed an annual planning area capacity table.[21]

Staff speculates that the discussions held and the decision by staff to agree to withhold 2006-2008 data from all aggregated summary tables was a meaningful concession. While the planning areas are dominated by the IOU contained within each one, the 15-20% contribution of POUs and ESPs is apparently sufficient for them to agree to this level of disclosure. Given this annual disclosure, the specific question before the Energy Commission is whether the IOUs have demonstrated that monthly data aggregated to a quarterly level does not adequately protect trade secrets. Staff's assessment discusses the capacity and energy summary tables separately.

i. Refutation of appeals of planning area quarterly capacity tables

PG&E and SDG&E have appealed the Executive Director's proposal for quarterly capacity tables for planning area aggregations. SCE has not.

In its appeal, SDG&E offers no specific rationale for opposing quarterly planning area capacity tables, versus supporting annual planning area capacity tables. Its arguments are quite general, as they have been in all of its applications for confidentiality .

PG&E asserts that all LSEs plan to an annual target, and that there is no public policy rationale for the release of quarterly information. Staff disagrees with both elements of PG&E's claim.

Before we address PG&E's claim, however, we refer back to our discussion on bundled customer quarterly capacity table. The IOUs have failed to demonstrate that the aggregated summary table is a trade secret. Thus, an aggregated summary table that also includes additional end-use customers also cannot be a trade secret, as planning area table is even more aggregated than an IOU bundled customer table.

[21] SCE Appeal, Appendix 2, pp. 3-4.

With respect to PG&E's assertion that IOUs plan to an annual target, we note that the resource adequacy requirements applicable to LSEs under the CPUC's jurisdiction, impose monthly capacity requirements. Beginning with June 2006, each month's peak loads must be met by each LSE using qualifying capacity. It is possible for PG&E and other LSEs subject to these requirements to use the highest annual value for these monthly peaks, but that is not likely to be the least cost manner of satisfying the requirements, and such a gross solution would almost certainly be opposed by ratepayer protection groups. Further, resources must satisfy qualifying capacity rules, and for some seasonal resources, the qualifying capacity will fluctuate from month to month. Thus, from the resource adequacy compliance perspective, there is good rationale for public policy makers to understand the resource plan at the level of quarterly capacity tables as proposed by the Executive Director.

Second, apart from the regulatory compliance issues identified above, the very existence of the seasonal hydro-electric generation issues that PG&E raises as a rationale for protecting the data are precisely the reasons that public disclosure is important. To the extent that seasonal generation fluctuations do not naturally match seasonal load fluctuations, then complementary resource additions are needed to balance overall regional supply with demand. This kind of broad regional, not LSE-specific, examination is what the planning area aggregation level is designed to permit. Many groups need to have knowledge of supply/demand imbalances. Policy makers need this seasonal information to understand when making resource preference policy decisions. Generation developers need this knowledge to ascertain the market for new generation additions, and whether these are year-round or seasonal needs. LSEs outside of the region need this knowledge to understand how to assess the prospects for importing power from Northern California when other regions of the Western Interconnection have their own resource deficits. This level of understanding will lead to more cost-effective resources being available to customers, not fewer.

ii. Refutation of appeals of planning area quarterly energy tables

PG&E has appealed the Executive Director's proposal for quarterly energy tables for planning area aggregations. SCE and SDG&E have not. Thus this argument focuses exlusively on PG&E.

PG&E makes no specific justification for its opposition to planning area quarterly energy tables, but simply rejects all forms of quarterly aggregation of monthly data. Again, we refer back to our earlier discussion of the aggregation consisting of bundled customer quarterly energy needs, and note that an aggregation with other end-use customers in it cannot be entitled to any more protection than that available to the bundled customer quarterly energy table.

Unlike the planning area capacity table, which can inform the resource adequacy process now about to be implemented for June 2006 and subsequent months, there is no direct regulatory compliance issue to be informed using the quarterly energy tables. However, should the Commission decide that IOU-specific quarterly energy tables should not be

released, the Commission should strongly consider release of the planning area quarterly tables to provide at least a regional perspective. The further dilution by adding other LSEs in the region should diminish the impacts of the concerns that PG&E raises.

5. Conclusion

The Executive Director granted confidentiality to those LSEs requesting protection for resource plan data at the level of monthly, resource-specific values. The June 3 aggregation proposal condenses these data to perhaps 2-4% of the original size, leading to annual and quarterly summary tables for both IOU bundled customers and for control areas and planning areas. These aggregated values represent planning information less detailed than that commonly released by major IOUs around the West and by virtually all POUs here in California.

The disputed aggregation tables are not trade secrets. They are not directly connected to the specific products that IOUs buy or sell in the market place. They are distantly related to the amount or number of all of the various products that IOUs might need to buy or sell based on assessments made in later 2004/early 2005. Since they are only proposed to be released for years 2009 and later, they are long-term and not short-term. These assessments will be replaced, or altered, at least once more before year 2009 becomes current.[22] They are increasingly less accurate as time goes by and IOUs engage in actual transactions in the market that alters their actual supply/demand balance through time.

Even the quarterly summary tables provide only a crude idea of the total supply/demand gap that is predicted to exist under various sets of assumptions. They say nothing about whether or how much an IOU needs to buy of any specific market product. Many combinations of different market products would satisfy IOU energy and capacity requirements. To at least some degree, IOUs can postpone purchases of products stemming from RFO bid processes and implement another RFO process seeking lower bids or different types or combinations of products. However, the general information provided does send market signals to other market participants and to regulators that are likely to result in more cost-effective resources being available to the very ratepayers the IOUS are claiming they are protecting in these appeals. The companion testimony sponsored by Julia Frayer of London Economics International provides an explanation of how the IOU efforts to shield the planning data from disclosure, instead of protecting the interests of IOU ratepayers, may actually harm these ratepayers by making the market less efficient.

The Energy Commission staff believes that the IOUs have not demonstrated that the aggregation tables proposed by the Executive Director in his June 3, 2005 proposal are trade secrets, and therefore urge the Commission to reject the IOU appeals.

[22] The Energy Commission is required to provide the Integrated Energy Policy Report biennially, so as part of the proceeding leading up to the 2007 IEPR one could expect that the Energy Commission will require new resource plans from LSEs sometime in later 2006 or early 2007.

Table 1. Status of IOU appeals of aggregation proposals

Temporal aggregation	Proposal	Type	Published by Staff as summary table[23]	IOU positions
Annual	1. IOU bundled-customer specific results; report individual scenarios	Capacity	No	PG&E, SCE, and SDG&E oppose
		Energy	Yes, for each scenario	
	2. Planning Area Aggregation across LSEs; report individual scenarios	Capacity	Yes, for each scenario	
		Energy	Yes, for each scenario	
	3. Planning Area Aggregation Across LSEs; report range spanning scenarios (only proposed for capacity)	Capacity	No (can be constructed from proposal 2 tables)	
Quarterly	1. IOU bundled-customer specific results; report individual scenarios	Capacity	No	PG&E, SCE, and SDG&E oppose
		Energy	No	SCE and PG&E oppose
	2. Planning Area Aggregation across LSEs; report individual scenarios	Capacity	No	SDG&E and PG&E oppose
		Energy	No	PG&E opposes
	3. Planning Area Aggregation Across LSEs; report range spanning scenarios (only proposed for capacity)	Capacity	No	PG&E opposes

[23] CEC Staff Paper, CEC-150-2005-001, June 2005.

Table 2. Disclosure of Load and Resource Forecasts in Western Utility Resource Plans

Utility	*Forecast of:* Load	Resource Need	Resource Specification	Web Links
Arizona Public Service	Monthly C 2007-2011 p. 21-25	Monthly C 2007-2011 p. 21-25	Resource Categories (existing) Monthly E 2007-2011 p. 26-28	http://www.aps.com/files/rfp/2005_Reliability_RFP_Final.pdf
Avista	Monthly E & C 2004-2023 p. 48-67, 74-93	Monthly E & C 2004-2023 p. 48-67, 74-93	Resource Categories Annual E 2004-2023 p. 31	http://www.avistautilities.com/assets/resources/plans/electric/2003_IRP_Appendices.pdf
Idaho Power	Monthly E & C 2004-2013 p. 6-27	Monthly E & C 2004-2013 p. 67-73	Specific Resources Annual E & C 2004-2013 p. 87-98	http://www.idahopower.com/pdfs/energycenter/irp/2004_technical_appendix_final.pdf
NorthWestern Energy	Annual E 2004-2023 P. 55-57	Not Clearly Specified	Specific Resources Annual C Pre-2007 p. 18, 21	http://www.montanaenergyforum.com/pdf/EDSRPP.pdf
PacifiCorp	Annual E & C 2006-2025 p. 43 of Appendix	Annual E & C 2006-2015 p. 94-97 of Appendix	Specific Resources* Annual C 2006-2015 p. 190-193 of IRP	http://www.pacificorp.com/File/File47422.pdf (IRP) http://www.pacificorp.com/File/File47424.pdf (Appendix)
Portland General Electric	Annual E & C 2005-2022 p. 109-114	Annual E & C 2005-2022 p. 109-114	Specific Resources Annual E & C 2005-2022 p. 109-114	http://www.portlandgeneral.com/about_pge/regulatory_affairs/filings/pdfs/irp_supplement.pdf
Public Service Company of Colorado	Annual E & C 2004-2033 p. 33 of Appendix	Annual C 2004-2013 p. 280 of Appendix	Resource Categories Annual C 2004-2013 p. 129-140 of IRP	http://www.xcelenergy.com/docs/corpcomm/Document1of4.pdf (IRP) http://www.xcelenergy.com/docs/corpcomm/Document4of4.pdf (Appendix)
Puget Sound Energy	Monthly E (2006) Annual E & C (2006-2025) p. 161-162, 164 of IRP	Monthly E (2006) Annual E & C (2006-2025) p. 161-162, 164 of IRP	Specific Resources Annual C 2006-2025 p. 3-24 of Appendix	http://www.pse.com/about/supply/LCP/20050503/LCP_no%20appendices.pdf (IRP) http://www.pse.com/about/supply/LCP/20050503/Appendix%20G--Electric%20Results.pdf (Appendix)
Sierra Pacific	Annual E & C 2004-2024 p. 7 of Volume I	Annual C 2004-2024 p. 23, 39-41 of Volume VI	Specific Resources* Annual C 2004-2024 p. 39-41 of Volume VI	Not available online

Note: E = energy, C = capacity. Page numbers refer to document pages (e.g., 33 of 173), *not* numbered pages.
*Except for renewables, which are categorized more broadly as "renewables" or "planned purchases."

Appendix A
Summary of Resource Plan Disclosure by Representative Utilities

A selection of utility websites containing public resource planning information are summarized below for five of the largest investor-owned utilities outside of California.

Arizona Public Service Company

Arizona Public Service (APS) provided a summary of its long-term resource plan as an attachment to a bid solicitation package for long term capacity posted on its internet website on May 31, 2005. The document is available at http:/www.aps.com/files/rfp/2005_Reliability_RFP_Final.pdf

Data Categories	Variables Presented	Time Intervals
Customer demand	Annual system peak and reserve requirements	Annual 2007 - 2011
Resources	Annual capacity of existing generation resources by broad category	Annual 2007 - 2011
	Monthly energy generation by broad category of resources	Monthly for 2007 - 2011
Resource Need	Annual peak hour surplus or deficiency	Annual 2007 - 2011

Idaho Power Company

Idaho Power Company prepared a long-term integrated resource plan for 2004 – 2013 in July 2004. The most pertinent aspect is Chapter 4, which discusses monthly supply/demand capacity balances for years 2004 – 2013. The study is available at http:/www.idahopower.com/pdfs/energycenter/irp/2004_IRP_final.pdf

Data Categories	Variables Presented	Time Intervals
Customer demand	Monthly energy and peak capacity	Monthly 2004-2013
Resources	Annual energy and capacity by resource	Annual 2004-2013
Resource Need	Monthly peak hour surplus or deficiency for 3 scenarios	Monthly 2004 - 2013

PacifiCorp

In both 2003 and 2004, PacifiCorp posted long-term resource plans in great detail to its internet website. These resource plans are notable for both the detailed quantitative data on demand forecasts, resource plans, and net surplus or deficit position in future years, but also in the supporting documentation. Appendix F is a Load and Resource Capacity Report. The study is available at
http:/www.pacificorp.com/Navigation/Navigation23807.html

Data Categories	Variables Presented	Time Intervals
Customer demand	East and West system peak demand forecasts for a base case	Annual for 2006 - 2016
Resources	East and West resource peak capacity by resource categories for a base case	Annual for 2006 - 2016
Resource Need	East and West system surplus or deficiency for base case and 22 scenarios	Annual for 2006 – 2016

Portland General Electric Company

Portland General Electric (PGE) posted a supplement to its 2002 Integrated Resource Plan in February 2003. pp. 51-53 and Appendix A, pp. 98-104 are the most germane. The study is available at
http:/www.portlandgeneral.com/about_pge/regulatory_affairs/filings/pdfs/irp_supplement.pdf

Data Categories	Variables Presented	Time Intervals
Customer demand	Annual energy, peak month energy, and annual peak demand for system	Annual for 2005 – 2022
Resources	Annual energy, peak month energy, and annual peak capacity by specific resource	Annual for 2005 – 2022
Resource Need	Annual energy, peak month energy*, and annual peak capacity* resource requirement for system	Annual for 2005 – 2022

* Both peak month energy and peak demand are escalated for 12% planning reserves.

Puget Sound Energy

Puget Sound Energy (PSE) prepared and posted to its internet website a long-term least cost plan in April 2005. Chapters VI and XI are the most germane. The study is available at http:/www.pse.com/about/supply/resourceplanning.html

Data Categories	Variables Presented	Time Intervals
Customer demand	Average energy and peak demand for system	Monthly for 2006 Annual for 2005 – 2025
Resources	Average energy and peak capacity by categories of resources	Monthly for 2006 Annual for 2005 – 2025
Resource Need	Average energy and peak resource requirement (escalated for operating reserves) for system	Monthly for 2006 Annual for 2005 – 2025

Statement of Qualifications

Michael R. Jaske

Dr. Michael Jaske is a senior policy analyst in the Strategic Issues Integration Group of the Executive Office of the California Energy Commission (CEC). For twenty years he served as the Chief Demand Forecaster and provided technical direction for the Commission Staff's independent demand forecast, and assisted the Commission representing demand forecasts in other forums. Dr. Jaske plays an active role in the development and advocacy of the CEC's positions on energy market structure and electricity planning.

Dr. Jaske's educational background includes a BS in Chemical Engineering from Oregon State University, and a MS and Ph.D. in Systems Science, both from Michigan State University. Dr. Jaske is a member of the IEEE Power Engineering Society. Dr. Jaske serves on the Energy Policy Committee of IEEE-USA to educate national policymakers on electricity issues.

Dr. Jaske has published widely in the energy demand forecasting, DSM savings quantification, and air quality impacts literature. Dr. Jaske has provided overall guidance for several CEC staff activities concerned with retail restructuring of the electricity industry (direct access policy, load profiling, retail settlements and information flow, meter and data communication systems, utility service unbundling and ratesetting). Dr. Jaske is currently active in various California and Western Interconnection forums addressing the design and implementation of resource adequacy.

Dr. Jaske has testified numerous times at the CEC on demand forecasting and energy planning subjects. He has also sponsored CEC testimony at the California Public Utilities Commission in rate case proceedings on data collection, DSM measurement and evaluation to support demand forecasting; on use of CEC demand forecasts for resource planning; on design and operation of load curtailment programs and real-time tariffs; on the policies to regulate utility low emission vehicle programs; in the restructuring of the electricity utilities on service unbundling to implement retail competition, revenue cycle service credits and oversight; on the return of procurement responsibility to IOUs; on the confidentiality of planning data; and other topics.